Taylor & Wright,

Truss.

No. 45,653. Patented Dec. 27, 1864.

Fig. 1.

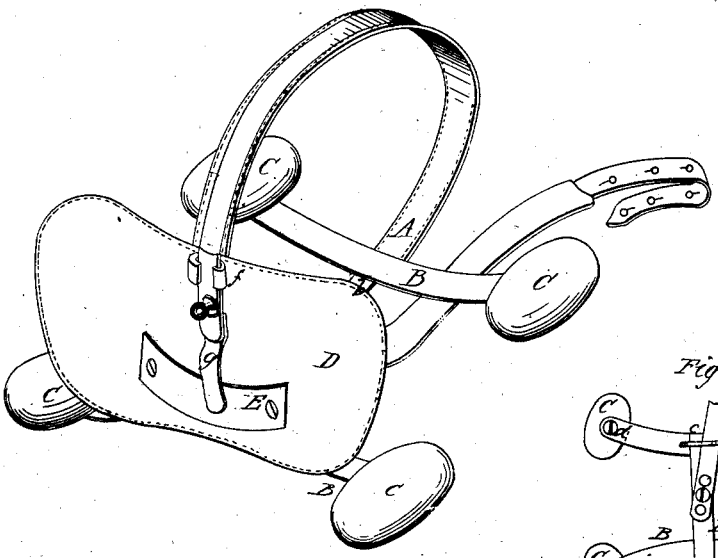


Fig 3.

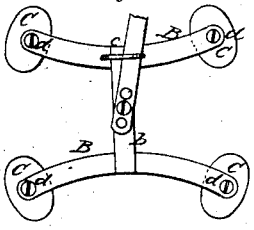
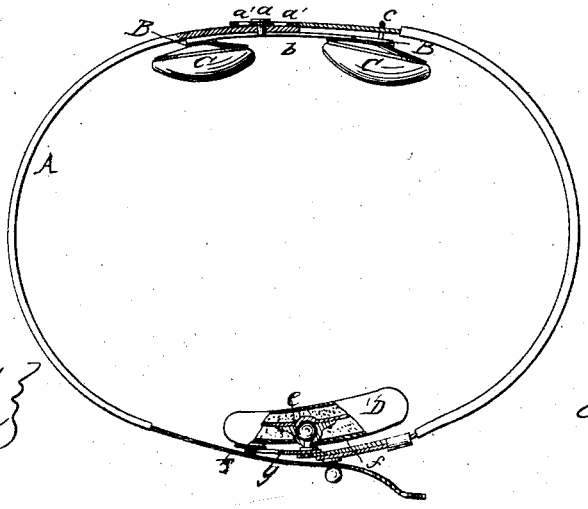


Fig. 2



Witnesses.
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UNITED STATES PATENT OFFICE.

G. W. TAYLOR AND A. E. WRIGHT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **45,653**, dated December 27, 1834.

To all whom it may concern:

Be it known that we, G. W. TAYLOR and A. E. WRIGHT, M. D., of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and Improved Truss and Supporter; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of this invention; Fig. 2, a sectional side elevation of the same. Fig. 3 is a detached rear elevation of the parts, showing the manner of their attachment to the body-spring.

Similar letters of reference indicate like parts.

This invention relates to an improvement in the back-braces of trusses or supporters; and it consists in combining with said back-braces a staple which straddles the body-spring so as to allow sufficient play for any movement of the body. The four pads which are secured to the ends of the back-braces and intended to bear on either side of the spine are of an oval or any other convenient form, and they are capable of being moved to any angle best suited to the conformation of the back.

The invention consists, also, in the application of an adjustable spring in combination with a ball-and-socket joint which connects the front pad to the body-spring, and with a friction-plate connected to the lower margin of said front pad in such a manner that by said spring any pressure desirable can be given on the lower margin of the front pad, imparting to said pad an upward and backward motion, and by the friction-plate free play is given to the spring, and said spring is prevented wearing and cutting the pad.

A represents the body spring of a truss, which is constructed in the ordinary manner and covered with leather or any other suitable material. The rear end of this body-spring is connected by a screw, *a*, to the cross-bar *b*, which unites the back-braces B so that said back-braces can be turned in either direction, and a staple, *c*, which is secured in one of said back-braces and made to straddle the body-spring, as clearly shown in Fig. 3 of the drawings. By the combination of the screw-pivot *a* and staple *c* the back-braces are firmly connected to the end of the body-spring, and still sufficient play is left to the same to render them adjustable, according to the convenience of the wearer. To each end of the back-braces B a pad, C, is secured by means of a screw-pivot, *d*. These pads are intended to bear on the opposite sides of the spine, and they are made oval, as clearly shown in Fig. 1. By turning them on the screw-pivot *d* they can be adjusted to any angle best suited to the conformation of the back. The end of the body-spring is provided with three or more holes, *a'*, to adjust the position of the back-braces by changing the position of the screw-pivot *a*.

The front pad, D, is secured to the front end of the body-spring by a ball-and-socket joint, *e*, and from the base-plate *f* of the ball extends a spring, *g*, which bears on the lower margin of the pad, as shown in Fig. 1. This spring is of malleable metal and it can be so adjusted as to exert any pressure desirable upon the lower margin of the front pad, giving said pad an upward and backward motion. In order to prevent the point of this spring from wearing or cutting the pad, we have applied a friction-plate, E, which gives free play to the spring and at the same time protects the pad.

These improvements are equally applicable to a truss and to a supporter, as will be readily understood, and we do not deem it necessary to give any further explanation in regard to that point.

We claim as new and desire to secure by Letters Patent—

1. The staple *c*, applied in combination with the cross-bar *b*, back-braces B, and body-spring A, in the manner and for the purpose substantially as herein shown and described.

2. The spring *g* and friction-plate E, applied in combination with the front pad, D, and body-spring A, in the manner and for the purpose substantially as set forth.

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Witnesses:
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